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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,492	01/21/2004	Arya R. Behzad	1875. 0960002	4643
26111	7590	09/01/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			LE, DINH THANH	
			ART UNIT	PAPER NUMBER
			2816	
DATE MAILED: 09/01/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/760,492

Applicant(s)

BEHZAD, ARYA R.

Examiner

DINH T. LE

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                              |                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/21/04</u> . | 6) <input type="checkbox"/> Other: ____                                                |

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**DETAILED ACTION*****Specification***

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections******Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 14-33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,731,160.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both invention disclose a filter circuit comprising:

- a capacitor;
- a first resistor and a second resistor or a resistive ladder;
- a transistor switch coupled to a third resistor;
- a fourth resistor or a full-up resistor coupled to the gate of the transistor switch and

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- a control circuit comprising triode device coupled to the gate of the transistor switch.

Claims 14-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-17 of copending Application No. 10/695313. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions disclose a filter circuit comprising:

- a capacitor;
- a first resistor and a second resistor or a resistive ladder;
- a transistor switch coupled to a third resistor;
- a fourth resistor or a full-up resistor coupled to the gate of the transistor switch and
- a control circuit comprising triode device coupled to the gate of the transistor switch.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-33 are rejected under 35 USC 103 (a) as being unpatentable over Misumi (JP35901842A) in view of Sasaki (US 5,563,557) and further in view of Chang et al (US 6,148,3968).

Misumi discloses in Figure 4 a filter circuit comprising:

- a high pass filter (3) having a capacitor (3) coupled in series with a resistor (3-0) at a first tap;
- a plurality of resistors (3-1 to 3-4); and
- a plurality of switches (15-1 to 15-4).

However, Misumi does not disclose that the resistor (3-0) including a plurality of resistors connected in series to provide a plurality of taps, the switches (15-1 to 15-4) are not semiconductor switches such as MSFETS and the tristate buffer coupled to the gate of MOSFET transistor. Sasaki teaches in Figure 1 a circuit comprising a switched resistor having a MOSFET switches (9-10) for easily being fabricated on an integrated circuit since the MOSFET switch can be formed on the IC. Chang et al teaches in Figure 3 a circuit comprising a tri-state buffer (G1, G2) for controllably providing an impedance isolation between the input (A) and the output (MA). It would have been obvious to a person having skill in the art at the time the invention was made to employ the MOSFET switch in the circuit of Misumi as taught by Sasaki and the tristate buffer as taught by Chang et al for the purpose of easily being formed on an IC that would reduce size and for controllably providing an impedance isolation between the control circuit and the transistor. Also, the skilled artisan recognizes that the resistor (3-0) of Misumi can be replaced with a series of smaller resistors having the resistance sum is equal to the resistance of the resistor (3-0) without alternating the performance of the filter circuit. Thus, replacing the resistor (3-0) with an equivalent of series resistors is considered to be a matter of a design expedient for an engineer and would have been obvious at the time of the invention.

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With regard to claim 33, since the triode device functions similar to the tri-state buffer, selecting the triode device for accommodating with the requirement of a predetermined system also considered to be a matter of a design expedient for an engineer depending upon a particular environment or application.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DINH LE  
Primary Examiner

August 24, 2004